

METHOD OF MOTION VECTOR DETERMINATION IN DIGITAL VIDEO COMPRESSION

Abstract

Pixel information of a current block is correlated with pixel information of a reference frame indicated by a first motion vector of a block proximate to the current block, pixel information of the reference frame indicated by a second motion vector of a block of the reference frame spatially coincident with the current block, and pixel information of predetermined regions of the reference frame. At least one of the first, second, and third motion vectors having the lowest cost function is selected as a candidate motion vector. Pixel information of the current block is correlated with pixel information of regions offset from the regions indicated by the candidate motion vectors to determine refined candidate motion vectors and corresponding refined cost functions. The refined candidate motion vector having the lowest refined cost function is selected as the motion vector of the current block.